

## WHAT IS CLAIMED IS:

1 1. A computer implemented method for establishing a Virtual Private  
2 Network (VPN) communication tunnel between a client computer and a  
3 server-side system, comprising:  
4 receiving a request to establish a VPN session with a server-  
5 side system from at least one client computer out of a plurality of client  
6 computers coupled to a modem within a client-side system, where said  
7 request contains login details for a user of said at least one client  
8 computer;  
9 determining a network address of said at least one client  
10 computer;  
11 authenticating said user based on said user login details; and  
12 establishing a VPN tunnel between said at least one client  
13 computer having said network address and said server-side system,  
14 where said VPN tunnel is established over said modem.

1 2. The computer implemented method of claim 1, wherein said receiving  
2 further comprises obtaining security details from said client.

1 3. The computer implemented method of claim 1, wherein said  
2 determining further comprises reading a connection log to extract the network  
3 address of said at least one client computer.

1 4. The computer implemented method of claim 1, further comprising the  
2 step, after said determining step, of storing said network address.

1 5. The computer implemented method of claim 1, wherein said  
2 authenticating further comprises the steps of:  
3 transmitting said login details to an authentication server for  
4 authentication; and  
5 accepting an authentication response from said server.

1 6. The computer implemented method of claim 5, wherein said  
2 transmitting further comprises sending said login details to a Radius server.

1 7. The computer implemented method of claim 1, wherein said  
2 authenticating step further comprises the steps of:  
3 transmitting said login details to an authentication server for  
4 authentication;  
5 accepting a challenge from said server; and  
6 re-transmitting said login details to said authentication server for  
7 authentication.

1 8. The computer implemented method of claim 1, wherein said  
2 determining further comprises ascertaining an Internet Protocol (IP) address  
3 of said client.

1 9. The computer implemented method of claim 1, wherein said  
2 determining further comprises ascertaining a Media Access Control (MAC)  
3 address of said client.

1 10. The computer implemented method of claim 1, further comprising:  
2 receiving a new request to establish a new VPN session with a  
3 different server-side system from a different client computer out of said  
4 plurality of client computers coupled to said modem within said client-  
5 side system, where said request contains new login details for a new  
6 user of said different client computer;  
7 determining a new network address of said different client  
8 computer;  
9 authenticating said new user based on said new user login  
10 details; and

11 establishing a new VPN tunnel between said different client  
12 computer having said new network address and said new server-side  
13 system, where said VPN tunnel is established over said modem.

1 11. The computer implemented method of claim 1, further comprising:  
2 receiving a new request to establish a new VPN session with  
3 said server-side system from a different client computer out of said  
4 plurality of client computers coupled to said modem within said client-  
5 side system, where said request contains new login details for a new  
6 user of said different client computer;  
7 determining a new network address of said different client  
8 computer;  
9 authenticating said new user based on said new user login  
10 details; and  
11 establishing a new VPN tunnel between said different client  
12 computer having said new network address and said new server-side  
13 system, where said VPN tunnel is established over said modem.

1 12. The computer implemented method of claim 1, further comprising  
2 severing the VPN tunnel after a predetermined time of inactivity.

1 13. A computer program product for use in conjunction with a computer  
2 system for establishing a Virtual Private Network (VPN) communication tunnel  
3 between a client computer and a server-side system, the computer program  
4 product comprising a computer readable storage and a computer program  
5 embedded therein, the computer program comprising:  
6 instructions for receiving a request to establish a VPN session  
7 with a server-side system from at least one client computer out of a  
8 plurality of client computers coupled to a modem within a client-side  
9 system, where said request contains login details for a user of said at  
10 least one client computer;

11 instructions for determining a network address of said at least  
12 one client computer;  
13 instructions for authenticating said user based on said user login  
14 details; and  
15 instructions for establishing a VPN tunnel between said at least  
16 one client computer having said network address and said server-side  
17 system, where said VPN tunnel is established over said modem.

1 14. The computer program product of claim 13, wherein said instructions  
2 for determining further comprise instructions for reading a connection log to  
3 extract the network address of said at least one client computer.

1 15. The computer program product of claim 13, wherein said computer  
2 program further comprises instructions for storing said network address.

1 16. The computer program product of claim 13, wherein said instructions  
2 for authenticating further comprise:  
3 instructions for transmitting said login details to an  
4 authentication server for authentication; and  
5 instructions for accepting an authentication response from said  
6 server.

1 17. The computer program product of claim 13, wherein said instructions  
2 for transmitting further comprise instructions for sending said login details to a  
3 Radius server.

1 18. The computer program product of claim 13, wherein said instructions  
2 for authenticating further comprise:  
3 instructions for transmitting said login details to an  
4 authentication server for authentication;  
5 instructions for accepting a challenge from said server; and

6 instructions for re-transmitting said login details to said  
7 authentication server for authentication.

1 19. The computer program product of claim 13, wherein said instructions  
2 for determining further comprise instructions for ascertaining an Internet  
3 Protocol (IP) address of said client.

1 20. The computer program product of claim 13, wherein said instructions  
2 for determining further comprise instructions for ascertaining a Media Access  
3 Control (MAC) address of said client.

1 21. The computer program product of claim 13, wherein said computer  
2 program further comprises:  
3 instructions for receiving a new request to establish a new VPN  
4 session with a different server-side system from a different client  
5 computer out of said plurality of client computers coupled to said  
6 modem within said client-side system, where said request contains  
7 new login details for a new user of said different client computer;  
8 instructions for determining a new network address of said  
9 different client computer;  
10 instructions for authenticating said new user based on said new  
11 user login details; and  
12 instructions for establishing a new VPN tunnel between said  
13 different client computer having said new network address and said  
14 new server-side system, where said VPN tunnel is established over  
15 said modem.

1 22. The computer program product of claim 13, wherein said computer  
2 program further comprises:  
3 instructions for receiving a new request to establish a new VPN  
4 session with said server-side system from a different client computer  
5 out of said plurality of client computers coupled to said modem within

6        said client-side system, where said request contains new login details  
7        for a new user of said different client computer;  
8                instructions for determining a new network address of said  
9        different client computer;  
10               instructions for authenticating said new user based on said new  
11        user login details; and  
12               instructions for establishing a new VPN tunnel between said  
13        different client computer having said new network address and said  
14        new server-side system, where said VPN tunnel is established over  
15        said modem.

1    23.    The computer program product of claim 13, wherein said computer  
2    program further comprises instructions for severing the VPN tunnel after a  
3    predetermined time of inactivity.